

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No. : 10/526,383 Confirmation No. : 3829
Filing Date : 13 September 2005 Art Unit : 1752
First Named Inventor: Nobuji Sakai Examiner :
Customer No. : 54884 Docket No. : Toyo-3
Title: : Radiation-Sensitive Negative-Type Resist Composition for Pattern
Formation and Pattern Formation Method

**REQUEST FOR CORRECTION OF APPLICATION TITLE AND CORRECTED
FILING RECEIPT**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir or Madam:

The Applicant requests that the Title of the above-identified application be corrected as follows:

From: Radiation-Sensitive Negative-Type Resist Composition for Pattern
Formation Method

To: Radiation-Sensitive Negative-Type Resist Composition for **Pattern
Formation and** Pattern Formation Method

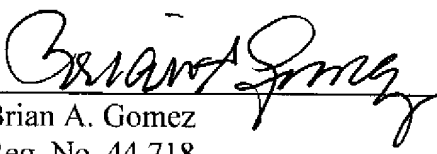
The application was a '371 filing from PCT Application No.: PCT/JP2003/011029. A copy of the publication page is attached hereto evidencing the title.

Upon correction of the title of the application, a Corrected Filing Receipt is respectfully solicited.

Respectfully submitted,
GOMEZ INTERNATIONAL PATENT OFFICE, LLC

Dated: 2-13-2007

By: _____


Brian A. Gomez
Reg. No. 44,718
1501 N. Rodney Street, Suite 101
Wilmington, DE 19806
Tel: (302) 351-3323
Fax: (302) 351-8456
E-mail: bgomez@gomez-ipo.com
Attorney for Applicants

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 March 2004 (18.03.2004)

PCT

(10) International Publication Number
WO 2004/023213 A1

(51) International Patent Classification⁷: G03F 7/038,
7/004

(21) International Application Number:
PCT/JP2003/011029

(22) International Filing Date: 29 August 2003 (29.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2002-252926 30 August 2002 (30.08.2002) JP

(71) Applicant (for all designated States except US): TOYO
GOSEI CO., LTD. [JP/JP]; 1603, kamimiyoden, Ichikawa-
shi, Chiba 272-0012 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SAKAI, Nobuji
[JP/JP], c/o Photosensitive Materials Research Center,

TOYO GOSHI CO., LTD., 2-1, Wakahagi 4-chome,
Inba-mura, Inba-gun, Chiba 270-1609 (JP). TADA,
Kenaro [JP/JP]; c/o Photosensitive Materials Research
Center, TOYO GOSHI CO., LTD., 2-1, Wakahagi 4-chome,
Inba-mura, Inba-gun, Chiba 270-1609 (JP)

(74) Agent: KURIHARA, Hiroyuki; Kurihara International
Patent Office, Iwasaki Bldg 7F, 3-15 Hiroo 1-chome,
Shibuya-ku, Tokyo 150-0012 (JP).

(81) Designated States (national): CA, CN, KR, SG, US.

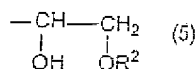
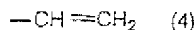
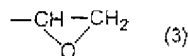
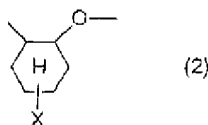
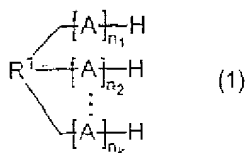
(84) Designated States (regional): European patent (AT, BE,
BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

Published:

— with international search report
— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

[Continued on next page]

(54) Title: RADIATION-SENSITIVE NEGATIVE-TYPE RESIST COMPOSITION FOR PATTERN FORMATION AND PAT-
TERN FORMATION METHOD



(57) Abstract: The radiation-sensitive negative type resist composition for pattern formation containing an epoxy resin, a radiation-sensitive cationic polymerization initiator, and a solvent for dissolving the epoxy resin therein, characterized in that the resist composition, through drying, forms a resist film having a softening point falling within a range of 30 to 120 °C and that the epoxy resin is represented by formula (1): (wherein R¹ represents a moiety derived from an organic compound having k active hydrogen atoms (k represents an integer of 1 to 100), each of n₁, n₂, through n_k represents 0 or an integer of 1 to 100, the sum of n₁, n₂, through n_k falls within a range of 1 to 100; and each of "A"s, which may be identical to or different from each other, represents an oxy cyclohexane skeleton represented by formula (2); (wherein X represents any of groups represented by formulas (3) to (5); and at least two groups represented by formula (3) are contained in one molecule of the epoxy resin)).